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ABSTRACT

Described is a system (created by the Great Lakes Region Special Education Instructional Materials Center) for classifying auditory learners and matching them to appropriate auditory learning experiences. The learner classification system outlined utilizes an organizational table that accommodates five learner variables (mental age, chronological age, performance grade level, social-emotional development, and cognitive development) and defines each variable at three different learner stages. Characteristics of each learner stage are enumerated, such as the Stage 1, learner's developing qualities of trust, the Stage 2, learner's ability to follow a series of events, and the Stage 3, learner's ability to solve verbal problems. Three levels (minimal, instructional, and competency) which relate to the teacher's use of an instructional material are discussed. Also presented are three hypothetical instructional materials, each followed by examination of the particular aspects of the material that should be considered when matching its use to a student. (LS)

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BRIDGING THE GAP BETWEEN MATERIALS AND LEARNERS: MAXIMIZING AUDITORY INSTRUCTION

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To provide a meaningful auditory learning experience for a child demands a full understanding of all aspects of the learning environment. Of particular importance are the unique characteristics of the child, the unique characteristics of the auditory instructional material, and the effective matching of the two. This paper describes a system for classifying auditory learners and matching them to appropriate auditory learning experiences. This system was created by the Great Lakes Region Special Education Instructional Materials Center.

The GLRSEIMC spent an entire year investigating the use of auditory instruction with children who learn best through the auditory channel. These "advantaged" auditory learners were drawn from a number of schools enrolling different types of handicapped children and youth. It was discovered that without a viable procedure for examining these learners it would be impossible to match them with appropriate auditory instructional materials. After observations of children with materials, the **Learner Classification System** was designed and refined during the year as a procedure that would allow a basis for making appropriate matches between learner and material.

LEARNER CLASSIFICATION SYSTEM

The **Learner Classification System** utilizes an organizational table that accommodates five "learner variables" and defines each variable at three different "learner stages." The system provides a single meaningful descriptor for understanding the type of learner for which a material is most appropriate. This descriptor (Stage I, Stage II, or Stage III) defines the mental age, chronological age, performance grade level, level of emotional/social development, and level of cognitive development. The following table presents the components of the **Learner Classification System** and the definition of characteristics at each learner stage.

LEARNER CLASSIFICATION SYSTEM

Learner Variables		Learner Stages: Stage I	Stage II	Stage III
Descriptor: Numeric	MA	2-7	7-11	11-18
	CA	3-	5-	9-
	Performance Grade Level	Pre-school - 1	K-6	5-12
Social Emotional Development		Trust of self and others; developing self-image of competence and achievement; a sense of autonomy and initiative	Integration of self-concept, values, achievement; peer influence beginning	Developing identity; group relationships of major importance
Cognitive Development		Egocentric and intuitive; attention focused on single salient features or attributes; isolated thoughts	Thinking about concrete events or objects; integration of isolated thoughts into systems of thoughts; selective generalization	Logical and scientific in thinking abstract and hypothetical processes cause exaggerated concern for self

Discussion of Learner Variables

Each of the five learner variables can be seen as a developmental process. Children operate at different developmental levels for each of the variables. In other words, when a child operates at Stage I in mental ability, he will also be operating at Stage I for the other variables. Of course there are exceptions to this, but most children are found to be consistent.

These characteristics of learners are designed to provide a framework for matching a particular material appropriate to a particular child for an enjoyable auditory learning experience.

The following working definitions of learner variables and the stages for each are provided to clarify the interpretation and use of the **Learner Classification System.**

Numeric Descriptors

Numeric descriptors (mental age, chronological age, and performance grade level) are used because these identifiers are most commonly found in catalog descriptions of instructional materials. These descriptors usually appear as numbers. While helpful in delimiting the intended student audience, more detailed information is often necessary for decision making, especially when making decisions regarding instructional materials for a handicapped child. Teachers often order a material which is seemingly "perfect" for a particular grade level, chronological age, or mental age, only to find the student does not possess the cognitive or social-emotional characteristics necessary for successful use of the material. Numeric descriptors can be meaningful, however, when considered in relation to the other learner variables that follow.

Social-Emotional Development

The social-emotional developmental characteristics of a handicapped child seem to be important in selecting materials for children in order to match their needs, interests, and motivation with the content and format of the auditory material. The social-emotional abilities of the handicapped student may be an important factor in the success of a particular material. An auditory instructional material that is not highly related to a child's needs, interest, and motivation will not sustain the child's attention for sufficient periods of time to make the material instructionally useful.

Cognitive Development

The present cognitive development of the student determines the extent to which he can perform the auditorily-presented tasks. Entry skills and pre-requisite learning need to be considered as well as performance objectives. The auditory material that is appropriate for a particular child is one that builds on the child's prior learnings and provides a logical "next step" in the learning process. An understanding of the child's cognitive development can insure the selection of an instructional material that moves the child toward new learning.

LEARNER STAGES

Discussion of Stage I

Learner Variables		Stage I
Descriptor Numeric	MA	2-7
	CA	3-
	Performance Grade Level	Pre-school - 1
Social Emotional Development		Trust of self and others; developing self-image of competence and achievement; a sense of autonomy and initiative
Cognitive Development		Egocentric and intuitive; attention focused on single salient features or attributes; isolated thoughts

A Stage I learner may be described as being between the ages of two and seven mentally, at least three years of age chronologically, and may be behaviorally similar to a pre-schooler or early elementary grade student. More specifically, he is a child who has explored his environment through his senses and motor abilities. Therefore, his mental ability is directly related to these first-hand experiences.

Depending upon the quality and quantity of these cognitive experiences, he is ready to move on to **symbolic associations**. He is associating thought and language with actual events and objects (naming, categorizing, recognizing pictures). This acquisition will allow him to internalize action rather than being entirely dependent on his direct sensory-motor actions. At this stage, language normally becomes more refined. The learner, however, is largely **egocentric**. He is self-interested and self-absorbed, both in language and social behavior and the only interpretation he can **assimilate** or absorb is his own. It is only by becoming less self-centered around the mental age of six or seven that the learner is able to, and begins to, accommodate other's viewpoints.

At the same time he is acquiring language, the Stage I learner is able to see only parts of an event rather than the entire event. He fixes his attention on only one aspect at a time and because of this he makes judgments based on the part(s) that he sees. For example, a longer row of marbles looks like more to him even if it has, in fact, less marbles than the shorter row. :.:.· These reasoning abilities limit his learning and therefore define more specifically the type of materials and experiences we choose for this learner.

The social-emotional factors which affect the Stage I child are his developing qualities of **trust**, built upon consistent and continuous experiences with close and caring individuals; **autonomy**, built upon successful independent actions; and **initiative**, built upon new self-control and self-esteem. He is now capable of better organizing his behavior to attain certain goals. Through these significant and meaningful learning experiences, the child develops a more realistic self-image relating to his own achievement and competence.

Three predominant and particular trends relating to cognitive and social-emotional factors seem to stand out at the Stage I level. They need to be considered if meaningful learning is to be promoted.

1. **Necessity for proximity:** If the Stage I learner is physically close to the learning situation, he is more apt to be involved in the learning process. The learning situation can include a teacher, a cassette tape recorder, a puzzle, a sandbox. Actually, this means any animate or inanimate object from which a child can learn. The **physical nearness** of things **structures for personal involvement** which is of special importance for this egocentric child. The egocentric nature of the Stage I learner demands proximity.

2. **Inability to generalize:** A Stage I learner, by having to be close to the learning stimulus, tends to **focus on one aspect** of a situation. He fails to see and/or hear the entire event. By having only limited and partial experiences, he **cannot generalize** to broader, more global concepts.

3. **Individuality of responses:** The **selection** of those things on which a learner focuses is **based on past meaningful personal experiences**. Hence, a Stage I learner may select some part of an event which to him has meaning, although this selected part and its attached meaning may seem alien or insignificant to the adult's perception of the situation. These learners' responses need to be met with openness. Asking the child for clarity will help the adult understand the meaning behind the child's individual response and ultimately help the child develop his own thinking processes.

Discussion of Stage II

Learner Variables		Stage II
Numeric Descriptor	MA	7-11
	CA	5-
	Performance Grade Level	K-6
Social Emotional Development		Integration of self-concept, values, achievement; peer influence beginning
Cognitive Development		Thinking about concrete events or objects; integration of isolated thoughts into systems of thoughts; selective generalization

A Stage II child may be described as being between the ages of seven and eleven mentally, at least five years of age chronologically, and is behaviorally similar to an elementary grade student.

Most handicapped children function cognitively between the mental ages of seven and eleven. Consequently, **the vast majority of learners in**

elementary and special education classrooms are operating within Stage II. This finding necessitates a further examination of certain developmental characteristics. Two sub-stages, IIa and IIb, have been designated to operationalize this finding.

Stage IIa

In contrast to a Stage I learner, a Stage IIa learner no longer bases his judgment on perception or selected parts of events. He begins to organize his previously isolated, random thoughts into integrated systems of thought. Problem-solving behavior begins to emerge; however, he finds solutions to problems only with the aid of concrete objects and sequenced events.

Stage IIa is an enormously complex transitional stage. The cognitive behaviors that the young child is developing and demonstrating are very inconsistent and unpredictable. He is beginning to develop cognitive skills, but they are not yet reliable and should not be depended upon. These new cognitive skills will likely vary from situation to situation.

In social-emotional development, the self-concept of the Stage IIa child begins to be more integrated, primarily because the child is expanding beyond the totally egocentric stage of development. However, he is still primarily influenced by family and teacher, and is still not completely open to influence from others. Peer influence comes later. Successful cognitive experiences take on new meaning, as these school years are important ones in the development of basic skills.

A Stage IIa learner is generally more stable in the social-emotional area than he is in the cognitive area. These two areas are quite interactive, however, making it difficult to rely on this generalization. For a child handicapped in either area, a breakdown in both social-emotional and cognitive development could easily occur and prevent further intellectual and personality development.

Stage IIb

Cognitively, a Stage IIb learner can now follow a series of events, see the changes that occur from one event to another, and can follow a line of reasoning back to its starting point. That is, he can think about things systematically and efficiently. However, he is not yet at a point where he can deal with hypotheses or purely verbal problems. He still needs—indeed, depends upon—concrete objects and sequenced events to aid in problem-solving. He is able to solve problems, but only by considering the most apparent solutions and trying them out.

As the Stage IIb learner organizes his thought systems he is also integrating his self-concept. His identity, values, and achievement are becoming consistent with each other. His success in acquiring appropriate skills results in approval from significant others which in turn reinforces and stabilizes his self-concept.

By this point, "significant others" includes the peer group, which now becomes very important in determining the nature and type of social reinforcers.

For Stage II learners (both IIa and IIb), four predominant and particular trends relating to cognitive and social-emotional factors seem to stand out. They need to be considered in planning for meaningful learning to take place.

1. **Selectivity in Generalizing:** Given sufficient past experiences and the integration of pieces of information into more global concepts, the Stage II learner is **cognitively able to generalize.** At this point, however, the learner's unique social-emotional personality surfaces. He **selectively chooses to generalize** about those things he perceives as favorable as well as those he views as threatening. For instance, "All of you who were screaming and shouting..." (a generalized reprimand) has no personal meaning for most Stage II learners, especially those who **were** screaming and shouting! On the other hand, "You've all been doing good work" (a generalized statement of approval), will be more apt to have personal meaning to the Stage II learner. He perceives this latter statement as favorable regardless of the actual quality of his work.

2. **Necessity for concrete objects and events:** During Stage II, the child becomes able to apply logical thinking but only to concrete problems. For a child to solve a problem or make a decision, there needs to be at least one concrete example given, preferably in the form of something that the child can physically handle. **Manipulative objects** are not just "toys" or "kid stuff," they are the **essentials of the learning process**. To deny these—even to children functioning at the Stage IIb level—is to deny access to higher levels of thinking.

3. **Vascillation in decision-making:** During Stage II, the child becomes more open to influence from others, particularly peers. As he takes in more information regarding how others view situations, he tends to process this in terms of immediacy or even in terms of how concrete or personally relevant the situation is. In the earlier years of Stage II, parents and teachers predominantly influence his decision-making. In later years **peers begin to influence.** But there is still a **tendency to return to those influences which have been paramount.**

Therefore, the child appears to vascillate, especially since there is often a conflict between what peers urge and adult authorities urge. This vascillation tends to make the child appear capricious and unpredictable.

4. **Affinity for obvious and apparent:** Considering the need for concreteness and the personal selectivity in generalizing, it is not surprising that the Stage II learner is often attracted to the most obvious and apparent solution to a problem. He may be able to search out more complex solutions, but usually **prefers to live with the most simple and comfortable answer.** Of all the trends in Stage II, this tendency has the most "staying power," and only serious instructional effort can overcome this tendency in later stages.

Discussion of Stage III

Learner Variables		Stage III
Descriptor Numeric	MA	11-18
	CA	9-
	Performance Grade Level	5-12
Social Emotional Development		Developing identity; group relationships of major importance
Cognitive Development		Logical and scientific in thinking abstract and hypothetical processes cause exaggerated concern for self

A Stage III learner may be described as being at least 11 years of age mentally, at least nine chronologically, and operating approximately at the fifth grade level or above. Stage III is thought to be the period characterized by the development of formal, logical thinking.

Formal, logical thinking is the ability to organize data, reason scientifically and generate hypotheses. For example, a Stage III learner can easily and logically solve **verbal problems** that cannot be solved by a Stage II learner, such as the following standardized verbal problem:

> Edith is fairer than Susan; Edith is darker than Lily;
> who is the darkest of the three? (Piaget, 1968, p. 162,
> in Wadsworth, 1971, p. 104)

Children in Stage II have difficulty solving this problem. Not until Stage III can children usually deal successfully with verbal problems as they dealt with concrete problems around the mental age of seven or eight.

Another pervasive aspect of the Stage III learner's thinking is concerned more with his social-emotional development. This learner applies his logical thinking to life as he thinks it should be, and not to life as it really is. He becomes, in essence, an idealist and is egocentric in his judgments, since in his mind the best solution for him is also the best solution for everyone.

This type of thinking influences all phases of the Stage III learner's personality, language and behavior. It characteristically pervades his family and peer relationships, authority relationships and personal identity. Group relationships are of utmost importance and he places a great deal of emphasis on what others think of him.

The cognitive and social-emotional development of Stage III is essential to the subsequent development of adult thought, but this does not insure adult thought. The implementation of formal thought in this stage is initially egocentric. The developing adult does not differentiate between many possible perspectives. Objectivity of thought with respect to conflicting issues is attained and egocentrism lost when the Stage III learner assumes adult roles in the real world and can differentiate the many possible points of view. (Inhelder and Piaget, 1958)

Three characteristic trends in thinking evolve during Stage III. For instructional planning, it is important to note that these trends emerge during this stage and that **they are not present before this stage.**

1. **Liberation from present, tangible problems:** In striking contrast to the Stage II learner, the Stage III learner can solve hypothetical problems. He is able to **conceptualize things unseen or intangible.** No longer must he be presented with a "real" or concrete situation. He organizes and categorizes information according to his own system. This ability is particularly important when the Stage III learner **solves complex verbal problems.** Auditory materials, by definition, are mostly verbal and language dependent. As this learner hears auditorily presented information, he categorizes and selectively chooses personally relevant information, retaining this information for later use. It is this ability to do his **own selecting and organizing** which makes auditory materials most appropriate for this stage learner. With little external modification, most existing auditory materials can be used with this stage learner, since the student can do his own modifying as he hears the content.

2. **Logical and scientific in thinking:** In dealing with situations and problems, the Stage III learner is **aware** that logically derived conclusions have validity independent of factual truth. He reaches this awareness by using **coordinated thinking operations,** and by integrating solutions through the **use of general theories** and not singular and concrete operations. In addition, the Stage III learner can deal with a problem independent of the content.

3. **Egocentric and idealistic in thought and behavior:** The Stage III learner, in a sense, becomes possessed with his new-found powers of logical thought. The criterion for making judgments becomes what is logical and personally relevant to him, and not always what is realistic. He feels that the world should defer to logical idealistic schemes rather than to systems of reality. He does not yet understand that the world is not always rationally ordered, as he thinks it should be. He even sees in others, idealistic and perhaps non-rational qualities that may be obscured from an adult (rational) point of view.

In choosing instructional materials and experiences for the Stage III learner, we can look for those which present abstract concepts with high interest potential and which challenge his new cognitive capacity. Appropriate materials are those which expose this student to a wide variety of life-styles, values, work ethics, diverse cultures and which represent all sides without value judgments on the part of the presenter. The types of responses which are most likely to lead to higher thought processes are those which demand comparing and contrasting, and personal thoughts and feelings about issues without external adult criticism.

It seems as if Stage III learners consistently ask **"What's in it for me?"** If we understand that this **is** an appropriate question for this learner, we can better select materials and plan the learning experiences. Pre-testing and post-testing along with advance organizers are very appropriate for this level learner. They are quite capable of evaluating the learning experience for themselves.

INTENDED USE OF AN INSTRUCTIONAL MATERIAL

It is important to thoroughly understand the nature of an instructional material before using it with a student. Of course, it is equally important to understand the student and his unique characteristics. When evaluating the effectiveness of an instructional material it is also necessary to examine the **intent of the use of that material.**

There are three broad categories of use that are most commonly found in classrooms: **minimal, instructional, competency.** A single material can be appropriate for many different students depending upon the teacher's desired level of student performance.

Minimal

The primary use of an auditory instructional material at this level is for the providing of an "enjoyable" experience. Cognitive learning is minimal, but learning of negative behavior is minimized **as long as frustration with required output is avoided.** Materials in this category include those auditory experiences that are used as a "time out" from the regular classroom activities. Instructional materials that are used at the **minimal** level often support the social-emotional development of the child in an informal manner.

Instructional

At an **instructional** level, an auditory material accomplishes the instructional objective at some level. The child is able to learn something from the experience. Chances are good that repetition of the experience with no modification or only minimal modification will provide further learning. A large percentage of auditory instruction that is used in the classroom falls into this category of use. When the child has learned all that he can or will from a material that is used at an **instructional** level, the child has reached a **competency** level for the material.

Competency

At the **competency** level, the child is able to deal satisfactorily with the concepts and ideas that are presented. If the child is tested on the information presented by the material prior to actually using it, his performance is found to be perfect or near perfect. His post-test performance will be the same. The child has not learned anything new, but we have not necessarily wasted his time because the material reinforces prior learning. With affective materials the child will gain from the experience all that can be hoped. Chances are, however, if the child is exposed to a competency level material repeatedly, he will be bored with the experience.

These three levels relate to the teacher's use of an instructional material with a child. For one child in a classroom, a particular auditory material may be operating at a **minimal** level (not really learning, primarily recreational); for another child the same material might be operating at an **instructional** level (new information is being learned); and for another the same material might be operating at a **competency** level (not really learning, primarily review). It is important to remember that all three uses are appropriate but only when the teacher is aware of the level of use for each child. For the child who is operating at a **competency** level, the repeated use of the same material would be inappropriate and could easily lead to boredom. If a child is operating at a **minimal** level, and erroneously viewed as operating at an **instructional** level, the teacher may inappropriately use the same material on a number of different occasions. This would severely frustrate the child rather than provide a pleasurable experience. Similar mis-matches may occur at all levels of use. It is important to remember that children are always growing and changing. Today's performance level may not be the same as tomorrow's. By continually examining and re-examining the child's abilities we are able to better view the appropriateness of minimal, instructional, or competency activities.

INSTRUCTIONAL MATERIAL CHARACTERISTICS

In an attempt to provide clarity to the use of learner stages to assist in selecting and matching auditory learning experiences to specific students, a group of hypothetical instructional materials are presented. A discussion follows each hypothetical instructional material that examines the particular aspects of that material that should be considered when matching its use to a student.

Hypothetical Instructional Material A
"What Is It?"

A set of materials including a cassette tape and ten manipulative objects (pencil, small box, button, etc.). The objective of the material is for the student to be able to name at least three specific characteristics of each object (attribute naming) and also one common characteristic for each group of two objects (classifying, categorizing). The tape recording presents a series of "I'm thinking about..." situations in which the narrator describes characteristics of a single object (or group of objects) without naming the object until the end. The narration begins with the most general characteristics and gradually moves toward the more specific (i.e., it has weight, it has a color, it's made of wood, it's yellow,...). The child attempts to select the object from the group of ten. In the second part of the tape the narrator names the object (or group of objects) and the student names and categorizes the characteristics.

This material seems most appropriate for a Stage I learner at an instructional level. It could possibly be used with a Stage II learner to substantiate a competency level of performance. The rationale for use at an instructional level with a Stage I learner is based on the following:

Proximity is provided in the material by the inclusion of manipulatable objects. The structure of the material involves the child very closely with the objects.

The level of generalizing that is required of the student is minimal and experience-based. Any concepts that are built upon are drawn from content that is provided in the experience.

The objects that are included with the material seem to be those with which the child is already familiar. He is able to draw on past meaningful experience to assist in the task.

The material is open-ended in the sense that it will allow for individuality of response. The child who can go beyond the structured demands of the experience is able to do so.

Hypothetical Instructional Material B —
"Wild Animals"

A set of materials including a cassette tape, a set of six large picture cards each showing a wild animal in a natural setting, and a map of the world. The objective of the material is for the student to be able to identify the unique characteristics of each animal and its natural

habitat. The tape recording consists of a series of six separate presentations (one presentation for each animal). The presentation begins with a short description of the characteristics of the animal, and the location and description of its natural habitat. Next, the name of the animal is presented and the student describes the unique characteristics and the location and description of its natural habitat. This is followed by the beginning of a story about the animal. The student continues the story at the point the narration ends. The picture of the animal is used by the student throughout the section.

This material seems most appropriate for a Stage II learner at an instructional level. It could possibly be used with a Stage I learner at a minimal level (for enjoyment) or a Stage III learner at a competency level (for substantiation, review, or reinforcement of prior learning). The rationale for use at an instructional level with a Stage II learner is based on the following:

Concreteness is provided by the inclusion of specific auditory descriptions, pictures and a map. In order to conceptualize the natural functioning of a possibly unfamiliar wild animal, the learner needs to have a clear picture in hand, as well as in mind.

Based on past experiences and knowledge of other animals, the learner is able to selectively generalize to the new animals about which he is learning. He is able to integrate previously assimilated pieces of information about animals and therefore make appropriate generalizations.

It is most likely during the story telling and a group discussion following, that the Stage II learner's vascillation will surface. "Wild" animals may conjure up highly imaginative stories by some children. Others may feel that the instructional setting demands repetition of the taped descriptions. Peer and adult influences could therefore play a large role if the material serves as a catalyst to discussion and story telling rather than verification.

Considering the Stage II learner's affinity for the obvious and apparent and the descriptive nature of the cognitive material, it would not be surprising if this stage learner merely repeated or rephrased the given information. However, a good leader (teacher or student) can serve as a stimulator of relevant discussion that includes generalizations and logical thinking about wild animals and characteristics of the natural environment. This can be enhanced through the use of advance organizers, cueing, and questions interspersed with content.

Hypothetical Instructional Material C —
"You're The Jury"

A set of materials including a cassette tape and four different "Issue Cards." The objective of the material is for students, in small groups, to discuss four specified issues, identify the major conflicts in each issue, and define a potential solution to each issue. The tape recording presents four different simulated trials that include presentations by the prosecution, defense, and major witnesses. At the conclusion of each trial, the jury (students) are instructed to reach a decision in a defined area. The "Issue Cards" present the instructions of the judge. After the "jury" reaches their conclusion, they restart the tape and listen to the conclusions of the jury on the tape, and discuss their agreement or disagreement with the jury's conclusion.

This material seems most appropriate for a Stage III learner at an instructional level. It would have little value for a Stage I learner (at any level) yet could possibly be used with a Stage II learner at a minimal level. The Stage II learner might enjoy listening to a "court room" situation, but he would have difficulty in the discussion due to the lack of direct past experience that he needs to organize the information to make it more concrete. The rationale for use at an instructional level with a Stage III learner is based on the following:

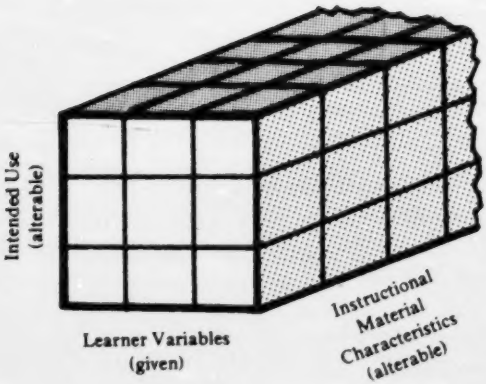
The verbal nature of this instructional material makes it ideal for the Stage III learner. The complexity of the verbal problems allows him an opportunity to do his own selecting and organizing. The simulation of the trial presents information in chronological order that the student must organize for decision making.

There is a demand for integrating information to form conclusions. The specific testimony and information presented on the tape must be carefully analyzed and assessed in terms of importance. Not all of the presented information is of the same value.

It may be noted, however, that this stage learner does not always comeup with the most logical and generalizable conclusion, but instead may draw conclusions that are personally relevant to him. As the learner begins to move forward in Stage III, he will be able to better deal with judgments that are more reality based and rationally ordered. This instructional material, due to its group focus, may assist the learner in further developing beyond egocentric/idealistic thought and move toward more rational generalizing which includes others.

An open group discussion can assure the Stage III learner an opportunity to compare and contrast viewpoints, judgments, personalities, conflicts and issues. Through this type of discussion, the learner can also learn more about his own developing identity and put "Where he's at" in a more total perspective.

BRIDGING THE GAP



This paper has presented three viable ways to insure an appropriate match between a student and the instruction. The one aspect of this match that is always given and not alterable is the student. The **learner variables** provide a vehicle for better understanding the learner's developmental stage. Through an analysis based on these variables we can better understand the "given."

The **instructional material characteristics** are those aspects of an instructional material that interact with the child and can promote learning. We can alter the learning situation by changing or modifying the instructional material to better meet the needs of the learner. We can also enhance the learning situation by examining and carefully defining our **intended use** of any instructional material. Often, the careful use of a material may take a potentially inappropriate material and enhance its value with a specific child.

To bridge the gap between learners and instructional materials demands a clear understanding of who the learner is and an ability to effectively select/alter the instructional material and carefully plan for its use.

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